L.—Descriptions of new Species of Butterflies from Tropical America. By Osbert Salvin, M.A., F.L.S., &c.

[Concluded from vol. iv. p. 181.]

33. Melinæa scylax.

3. Exp. 3.70 in. Antennæ yellow, black at the base; somewhat like M. mneme, Linn., as regards the markings of the upperside of the anterior wings; the transverse yellow band beyond the cell is narrower; the basal half of the inner margin is tawny, and not black: the posterior wings are tawny, with a narrow black margin: beneath as above, the base of the costa of the hind wings yellow; there are no white spots on the outer margin.

Hab. Bugaba, Chiriqui (Arcé).

Mus. S. & G.

34. Melinea orestes.

3. Exp. 3.50 in. Somewhat similar to *M. lucifer*, Bates (Trans. Linn. Soc. xxiii. p. 551), the yellow spot on the costa and that in the apex being wanting: the posterior wing, instead of being black between the cell and the outer margin, has a double transverse row of black spots, the outer margin being very narrowly bordered with black.

Hab. Peru, Pozzuzo (Pearce).

Mus. S. & G.

35. Melinæa cydippe.

3. Exp. 3.80 in. Very similar to *M. messenina*, Feld. (Voy. Nov. p. 356, t. 45. f. 11), differing chiefly in the cross band of the anterior wings being entirely tawny, instead of the outer half being yellow: there is a black spot in the angle between the second section of the median nervure and its first branch: both the outer and inner margins of the tawny band are less deeply sinuated.

Hab. S. Ecuador, Guadalquiza (Pearce); Peru, Pozzuzo

(Pearce).

Mus. S. & G.

Obs. This species is coloured exactly as Mechanitis mothone, Hew. Ex. B. ii. t. 15. f. 14.

36. Pronophila timanthes.

3. Exp. 3.30 in. Similar to *P. obscura*, Butl. (Cat. Satyridæ, p. 184, t. 4. f. 10), as regards the pattern of the underside of the posterior wings; the ocelli of the anterior wings are each surrounded by an oblong rufescent mark; on the upperside a similar series of marks is conspicuous, but the

ocelli are not pupillated; the general colour of both upper and under surface is of darker hue, and the apex of the anterior wings is more pointed than in *P. obscura*.

Hab. Veragua, Volcan de Chiriqui (Arcé).

Mus. S. & G.

37. Oxeoschistus cothon.

3. Exp. 2.35 in. Close to O. tauropolis (D. & H. Gen. Diurn. Lep. p. 358, t. 66. f. 1); on the upper surface are two additional yellow spots close to the apex of the anterior wing, and another between the second and third branches of the median nervure; the spot on the hind wing is larger; the band crossing the hind wings through the end of the cell on the underside is much broader, and includes a considerable portion of the extremity of the cell; the narrow band through the middle of the cell is concave instead of nearly straight.

Hab. Veragua, Volcan de Chiriqui (Arcé).

Mus. S. & G.

38. Heliconius sisyphus.

3. Exp. 3.80 in. Wings fulvous, edged and marked with black; antennæ yellow, black at the base; apical third of anterior wings, costa, outer margin, region of subcostal nervure, a comma-shaped spot within and a triangular spot at the end of the cell, three indistinct spots between the branches of the anterior wings, black; outer margin of posterior wings and a macular transverse central band black, outer margin spotted with white: beneath as above, but paler; the black apex of the anterior wings includes a faint submarginal row of white and four yellowish spots; there is a black streak between the costal and subcostal nervures of the posterior wings.

Hab. Peru, valley of the Cosnipata (Whitely).

39. Heliconius venustus.

3. Exp. 3.30 in. Like *H. anactoria*, Dby. (D. & H. Gen. Diurn. Lep. t. 15. f. 4); but the spot over the end of the cell of the anterior wing is wholly yellow, does not extend so far towards the apex, and has a black spot at the origin of the lower radial nervure.

Hab. Bolivia, Apolobamba (Pearce).

Mus. S. & G.

Obs. This species belongs to the *H. vesta* group; but the characters of its markings appear to be so strongly defined that the insect may fairly be considered a distinct race, if not a good species.

40. Heliconius etylus.

Exp. 3·30 in. Similar to *H. vesta*, but differs in having the anterior wings more elongated, and the yellow patch on the middle of the wing is represented by a small oval spot halfway between the cell and the apex. In the position of this spot this species differs from all races and varieties of *H. vesta*.

Hab. Ecuador, Guadalquiza (Pearce).

Mus. S. & G.

41. Heliconius montanus.

3. Exp. 3.70 in. Like *H. clysonyma*, Latr., from New Granada, but is larger, and the red band across the posterior wing is twice as broad.

Hab. Costa Rica, Orosi (Kramer).

Mus. S. & G.

42. Heliconius pachinus.

3. Exp. 3·40 in. Somewhat like *H. aranea*, F., but differs notably in the following points:—The base of the anterior wings is wholly black; the central yellow cross band is only interrupted by the nervures, and is altogether beyond the cell; the apical band is nearer the apex of the wing: the posterior wings are crossed transversely by a conspicuous yellow band, which is divided by the black nervules; the cilia of the outer margin is black: the underside is marked exactly as above, the red spots at the base of the posterior wings being just as in *H. aranea*.

Hab. Volcano of Chiriqui.

Mus. S. & G.

43. Heliconius sotericus.

3. Exp. 3·45 in. Very closely allied to *H. telesiphe* (D. & H. Gen. Diurn. Lep. t. 15. f. 2) in all its markings, and differs only in having the transverse band on the hind wings yellow instead of pure white; it is also slightly broader.

Hab. Guaymay, Ecuador (Buckley).

Mus. S. & G.

Obs. This species and Colanis tithraustes, described below, in Ecuador take the place of H. telesiphe and Colanis telesiphe, which are found together further south in Peru. The resemblance between the Heliconius and Colanis is most remarkable; but still more singular is the complete isomorphism in both genera as regards the band of the hind wings.

Mr. Buckley captured several specimens of this species

during his recent visit to Ecuador.

44. Colonis tithraustes.

Exp. 2.90 in. Very closely allied to *Colonis telesiphe*, Hew., but differs in having the transverse band of the hind wings yellow instead of white; in other respects the two species are quite alike.

Hab. Canelos, Ecuador (Pearce).

Mus. S. & G.

Obs. Mr. Buckley also took specimens of this species in Ecuador.

45. Eurema Arcæi.

3. Exp. 2.50 in. Like E. dione, Latr., but darker; a broad subtriangular tawny band crosses the anterior wing from the costa towards the posterior angle; the inner edge of this band is nearly straight, and passes close to but outside the elongated transparent spot between the first and second median branches. There are no transparent spots near the apex as in E. dione. The undersides of the two species are quite alike.

Hab. Volcano of Chiriqui (Arcé).

Mus. S. & G.

46. Melitæa crithona.

Exp. 1.70 in. Outer margin of anterior wings somewhat strongly emarginate, dark brown; anterior wing with two deep-tawny spots in the cell, three others between the median nervure, its second branch, and the inner margin; a broad tawny transverse band crosses the wing from the costa to the posterior angle: posterior wings with three undulating narrow tawny lines parallel to the outer margin. Underside with band on the anterior wings as above; basal half with ochre spots margined with dark brown; apex reddish brown, with a few whitish spots: posterior wings grey, with irregular brown lines; outer margin dark brown, running into a large patch near the costa; apical angle grey, with dark lines; the markings of the underside of the posterior wings much resemble those of M. ardys, Hew. The band across the anterior wings is somewhat like that in M. claphiæa, Hew.

Hab. Volcano of Chiriqui (Ârcé).

Mus. S. & G.

Obs. This is a well-marked species, and distinct from any I have seen.

47. Leptalis cinerascens.

3. Exp. 2.45 in. Antennæ black, palpi greyish, head and thorax black mixed with grey: anterior wings pointed, posterior angle rounded, not projecting; black, with five grey spots—one at the end of the cell and reaching to the

costal nervure, one near the origin of the upper and lower radials, one between the second and third median branches, and two near the apex: posterior wings rounded at the anterior angle; a sooty-brown patch surrounded by glossy brown occupies the costal half of the wing to the median nervure; outer margin and region of the median nervure black; rest of the wing grey, with yellow scales about the inner margin and anal angle. Beneath glossy brown: anterior wings with a large central fuliginous patch; outer extremity of the costa variegated with whitish: outer margin of the hind wings and the region of the anal angle yellowish; a yellow spot at the extremity of the precostal nervure.

Hab. Costa Rica (Carmiol); Chiriqui (Arcé).

Mus. S. & G.

Obs. Similar in form and the position of its markings to L. nemesis, Latr., but differs chiefly in the markings of both wings being grey instead of yellow.

48. Leptalis oreas.

3. Exp. 2.40 in. Antennæ, head, and thorax black; palpi black, with scattered grey hairs; abdomen black above, whitish beneath: apex of the anterior wings rounded, outer margin slightly concave; black, with a wide patch of clear yellow extending almost from the costa over the anterior angle of the cell and beyond it to the second median branch; this patch is somewhat concave, and is cut by the black nervures, the upper discocellular showing like an acute black projection; near the apex are three faint yellowish spots placed obliquely: posterior wings produced, slightly pointed at the end of the subcostal, and, as in other members of the genus, silky white at the base and along the inner margin, the region of the outer angle brownish; outer and inner margins and region of the median nervure black, enclosing an irregular oval patch of white. Anterior wings beneath cretaceous white on the inner portion; costal region silky grey, variegated with white, especially at the apex: posterior wings silky grey variegated with white about the base and outer margin; a band of glossy white, cut by the nervures, crosses the wing through the end of the cell; two other prominent spots of the same colour are placed, one between the third median branch and lower radial, the other between the costal and subcostal nervures; there are also two orange spots at the base of the wing—one over the precostal, the other between the median and submedian nervures.

Hab. Calobre, Veragua (Arcé).

Mus. S. & G.